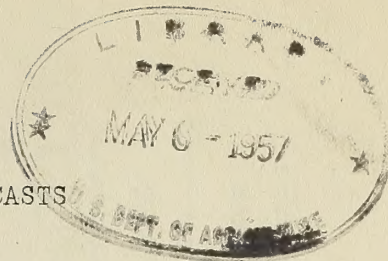


Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.



SNOW SURVEYS AND IRRIGATION WATER FORECASTS

FOR

OREGON

As of March 1, 1937

Issued March 11, 1937

The following data pertaining to snow surveys and irrigation water supply forecasts are provided by the Bureau of Agricultural Engineering of the U. S. Department of Agriculture in cooperation with the Oregon State Engineer, other Federal bureaus and local organizations. 1/

Comparison of snow cover with that of previous years.

For Oregon as a whole the snow-water content above 5000 feet elevation averages about 76% of that found at the same time last year. This is a slight improvement over the situation as of January 1 when the 1937 snow-water content above 5000 feet elevation averaged about 70% of that at the same time in 1936. Between elevations of 3500 and 5000 feet the snow-water content this year is about 15% greater than last year at this time. Soil of the watersheds is uniformly unfrozen and dry, except where spring melting is underway.

Status of Reservoir Storage as of November 1 to date:

Eastern Oregon: A slight storage increase since November 1. Storage is about the same now as last year except in Owyhee Reservoir which is now about 90% full and in Agency Valley which is now about 33% full as against 9% full last year at this time. There has been some storage increase since February 1.

Central Oregon: Slight to moderate storage increase since November 1. Crane Prairie Reservoir is practically full. Storage, on the average, is a little better than last year at this time.

Southern Oregon: Appreciable storage increase since November 1 in several reservoirs. Storage in practically all reservoirs, aside from Emigrant, is materially greater than last year at this time.

There has been only small storage increment during the past month to a number of reservoirs throughout the state and many of them remain practically dry at this time.

LIBRARY

U. S. Department of Agriculture
Washington, D. C.

Status of precipitation as of October 1 to date:

| Month | Oct. | | Nov. | | Dec. | | Jan. | | Feb. | | Period | |
|-----------|------|-------|-------|-------|------|-------|------|-------|------|-------|--------|-------|
| Section | P | D | P | D | P | D | P | D | P | D | P | D |
| S. E. | 0.00 | -0.64 | 0.04 | -0.82 | 0.54 | -0.43 | 0.89 | -0.10 | 0.96 | 4.39 | 2.43 | -1.90 |
| S. C. | 0.00 | -0.89 | T | -1.53 | 0.78 | -0.77 | 1.31 | -0.58 | 2.12 | +72 | 4.21 | -3.05 |
| N. C. | 0.02 | -0.64 | 0.28 | -0.72 | 1.00 | -0.41 | 1.88 | -0.13 | 0.89 | -15 | 4.07 | -2.25 |
| Col. Riv. | .04 | -0.81 | 0.07 | -0.71 | 1.35 | -0.31 | 1.89 | +0.15 | 1.51 | -01 | 4.56 | -1.69 |
| Wal. Mts. | 0.13 | -1.22 | T | -0.81 | 1.59 | -0.45 | 2.15 | +0.24 | 1.55 | -35 | 5.42 | -3.09 |
| Blue Mts. | 0.11 | -1.29 | 0.12 | -1.12 | 1.95 | -0.24 | 2.83 | +0.30 | 3.26 | +1.18 | 8.27 | -1.87 |
| Southern | 0.00 | -2.08 | -0.04 | -3.94 | 3.46 | -0.69 | 3.27 | -0.80 | 4.96 | +1.25 | 11.73 | -6.26 |
| Area | | | | | | | | | | | 5.85 | -2.87 |

P - Precipitation

D - Departure

S. E. - Southeastern Oregon range lands, Harney and Malheur Counties
 S. C. - Southcentral Oregon range lands, Lake County and Klamath County, except the Cascade Mountains.
 N. C. - Northcentral Oregon wheat and range lands, Crook, Deschutes, Jefferson, Wheeler and part of Grant Counties.
 Col. Riv. - Columbia River area wheat and range lands, Gilliam, Morrow, Sherman, Wasco, and part of Umatilla Counties.
 Wal. Mts. - Wallowa Mountain area forest and range lands, Wallowa and part of Baker County.
 Blue Mts. - The Blue Mountain forest and range area, Union and parts of Baker, Grant and Umatilla Counties.
 Southern - Southern Oregon irrigated section, Jackson and Josephine Counties.

Note: Data for the last month shown above are preliminary only, as they are based on a few stations only. Data for earlier months have been corrected to include all the stations in climatological data for the area.

Snow Cover Measurements

| Tributary Basins (Primary & Secondary & Snow Courses | Number | Location | | Elev. | Survey: Date | Average : Inches | | |
|--|--------|----------|------------|-------|-----------------|-----------------------------|------------------------------|----------------------------------|
| | | Sec. | Twp. Range | | | Snow Depth : (Inches) | Water Depth : (Inches) | Water Last of Feb. 1936 |

-3-

| | | | | | | | | |
|--|---|------|------|------|------|------|------|------|
| OWYHEE RIVER Taylor Canyon Lower Jack Creek Silver City Upper Jack Creek | UPPER COLUMBIA DRAINAGE T.O.W.E.R.S.N.A.K.E.I.N.O.R.E.G.O.N. | | | | | | | |
| | Nev. 32 | 39N. | 53E. | 5200 | 3-22 | 26.5 | 7.8 | 10.3 |
| | Nev. 19 | 42N. | 53E. | 7000 | 2-27 | 14.5 | 4.4 | 8.2 |
| | Idaho 6 | 5S | 3W | 6400 | 2-28 | 48.6 | 21.3 | N.R. |
| | Nev. 9 | 42N | 53E | 7800 | 2-27 | 27.2 | 7.3 | 15.4 |

MALHEUR RIVER

| | | | | | | | | | |
|-------------------------------------|--------------|----------|------------|------------|--------------|--------------|--------------|-------------|--------------|
| Blue Mountain Spring Rock Spring | #133 #134 | 21 23 | 15S 18S | 35E 32E | 5900 5100 | 2-28 2-26 | 45.9 27.2 | 15.3 7.9 | 18.6 10.4 |
|-------------------------------------|--------------|----------|------------|------------|--------------|--------------|--------------|-------------|--------------|

BURNT RIVER

| | | | | | | | | | |
|----------------------|------|---|-----|-----|------|------|------|-----|------|
| Blue Mountain Summit | #141 | 6 | 12S | 36E | 5098 | 2-28 | 32.5 | 9.3 | 10.5 |
|----------------------|------|---|-----|-----|------|------|------|-----|------|

POWDER RIVER

| | | | | | | | | | |
|--------|------|----|----|-----|------|------|------|------|------|
| Bourre | #154 | 33 | 8S | 37E | 5800 | 2-26 | 47.6 | 10.2 | 16.0 |
|--------|------|----|----|-----|------|------|------|------|------|

LOWER COLUMBIA DRAINAGE

JOHN DAY RIVER

| | | | | | | | | | |
|----------------------|-------|----|-----|-----|------|------|------|------|------|
| Beech Creek Summit | #216A | 4 | 12S | 30E | 4912 | 2-25 | 32.1 | 10.7 | 9.3 |
| Blue Mountain Spring | #133 | 21 | 15S | 34E | 5900 | 2-28 | 45.9 | 15.3 | 18.6 |
| Blue Mountain Summit | #141 | 6 | 12S | 36E | 5900 | 2-28 | 32.5 | 9.3 | 10.5 |
| Izee Summit | #964 | 28 | 16S | 29E | 5293 | 2-26 | 31.1 | 8.3 | 11.0 |
| Olive Lake | #245 | 14 | 9S | 33E | 6000 | 2-28 | 48.9 | 16.0 | 20.7 |
| Starr Ridge | #247 | 20 | 15S | 31E | 5193 | 2-26 | 25.0 | 7.3 | 7.5 |

| -4- | | | | | | | | | | | |
|---|--------|----------|------|--------|-------|----------------|-------------------------|---------------------------|--------|-----------------|--|
| Tributary Basins (Primary & Secondary & Snow Courses) | Number | Location | | | Elev. | Survey Date | Snow Cover Measurements | | | | |
| | | Sec. | Twp. | Range: | | | Average Snow | Average Water Depth | Inches | Last of Feb. | |
| DESCHUTES RIVER | | | | | | | | | | | |
| Cascade Summit | 321 | 7 | 23S | 6E | 5200 | 2-6 | 92.8 | 25.1 | | N.R. | |
| Crescent Lake | 325 | 11 | 24S | 6E | | 2-7 | 50.7 | 11.0 | | N.R. | |
| Ochoco Meadows | 341 | 21 | 13S | 20E | 5200 | 1-21 | 29.7 | 6.1 | 1-3 | 4.8 | |
| Tamarack | 342 | 8 | 15S | 25E | 4600 | 2-19 | 45.2 | 13.6 | 2-14 | 13.5 | |
| Three Creeks Meadows | 331 | 10 & 11 | 17S | 9E | 5100 | 2-25 | 26.1 | 7.2 | | N.R. | |
| | | | | | | 2-9 | 63.9 | 18.5 | | N.R. | |
| WILLAMETTE RIVER | | | | | | | | | | | |
| Cascade Summit | 321 | 7 | 23S | 6E | 5200 | 2-6 | 92.8 | 25.1 | | N.R. | |
| INTERIOR DRAINAGE | | | | | | | | | | | |
| HARNEY BASIN | | | | | | | | | | | |
| Idylwild Camp | 961A | 33 | 20S | 31E | 5200 | 2-26 | 21.8 | 5.7 | | 10.9 | |
| Izee Summit | 964 | 28 | 16S | 29E | 5293 | 2-26 | 31.1 | 8.3 | | 11.0 | |
| Rock Spring | 134 | 25 | 18S | 32E | 5100 | 2-26 | 27.2 | 7.9 | | 10.4 | |
| Starr Ridge | 247 | 20 | 15S | 31E | 5193 | 2-26 | 25.0 | 7.3 | | 7.5 | |
| WEST COAST DRAINAGE | | | | | | | | | | | |
| NORTH UMPQUA RIVER | | | | | | | | | | | |
| Diamond Lake | 743 | 29 | 27S | 6E | 5185 | 2-20 | 68.2 | 20.1 | | N.R. | |
| North Umpqua near Lake Creek | 742 | 19 | 26S | 6E | 4215 | 2-19 | 55.2 | 14.1 | | N.R. | |
| Trap Creek | 741 | 1 | 27S | 4E | 3800 | 2-16 | 48.0 | 14.4 | | N.R. | |

| Tributary Basins (Primary & Secondary) | Number | Location Sec. Twp. Range | Elev. | Survey Date | Snow Cover Measurements | | | |
|---|--------|-----------------------------|-------|----------------|----------------------------------|----------------------------------|----------------------------|------------------|
| | | | | | Average : Depth : (Inches) | Average : Water : (Inches) | Water : Last of Feb. | Inches : 1936 |

ROGUE RIVER

| | | | | | | | | | |
|-------------------------|------|----|-----|----|------|------|-------|------|------|
| Althouse | 7216 | 17 | 41S | 7W | 4400 | 2-15 | 48.1 | 18.6 | N.R. |
| Anna Springs | 831 | 19 | 31S | 6E | 6018 | 2-23 | 101.6 | 37.8 | 52.1 |
| Billie Creek Divide | 722 | 17 | 36S | 5E | 6000 | 2-21 | 70.1 | 27.4 | 36.3 |
| Fish Lake | 725 | 3 | 37S | 4E | 4865 | 2-23 | 45.1 | 17.2 | 19.2 |
| Goollaway Gap | 726 | 32 | 32S | 3W | 3000 | 1-28 | 48.8 | 9.9 | 0.0 |
| Goollaway Mountain | 7215 | 30 | 32S | 3W | 3730 | 1-31 | 83.2 | 24.2 | N.R. |
| Hyatt Prairie Reservoir | 723 | 15 | 39S | 3E | 4900 | 2-25 | 47.8 | 15.0 | 11.4 |
| Siskiyou Summit | 728 | 17 | 40S | 2E | 4630 | 2-26 | 39.5 | 14.5 | N.R. |
| South Fork Canal | 7218 | 12 | 33S | 3E | 3500 | 3-4 | 26.5 | 11.6 | N.R. |

KLAMATH LAKE BASIN

| | | | | | | | | | |
|---------------------------|-----|----|-----|---------|------|------|-------|-------|------|
| Anna Springs | 831 | 19 | 31S | 6E | 6018 | 2-23 | 101.6 | 37.8 | 52.1 |
| Beatty 2/ | | 22 | 36S | 12E | 4300 | 2-28 | 4.0 | 1.5 | 0 |
| Billie Creek Divide | 722 | 17 | 36S | 5E | 6000 | 2-21 | 70.1 | 27.4 | 36.3 |
| Chemult No. 1 | 834 | 21 | 27S | 8E | 4760 | 2-28 | 33.4 | 10.5 | N.R. |
| Chemult No. 2 2/ | | 21 | 27S | 8E | 4761 | 2-28 | 28.0 | 10.3 | 12.5 |
| Chiloquin 2/ | | 34 | 34S | 7E | 4187 | 2-28 | 20.1 | 4.0 | 2.0 |
| Crystal 2/ | | 26 | 34S | 6E | 4200 | 2-28 | 40.0 | 10.5 | 11.5 |
| Port Klamath 2/ | | 22 | 33S | 7 1/2 E | 4150 | 2-23 | 21.7 | 8.2 | 7.4 |
| Kirk 2/ | | 1 | 33S | 7E | 4533 | 2-28 | 34.0 | 9.5 | 14.6 |
| Lake-O-The-Woods No. 1 | 835 | 11 | 37S | 5E | 4160 | 2-28 | 37.3 | 9.4 | N.R. |
| Lake-O-The-Woods No. 2 2/ | | 15 | 37S | 5E | 4960 | 2-28 | 45.0 | 13.25 | 15.5 |
| Quartz Mountain 2/ | | 33 | 37S | 16E | 5504 | 2-28 | 31.5 | 7.2 | 9.8 |
| Pelican 2/ | | 10 | 36S | 6E | 4200 | 2-28 | 22.5 | 7.0 | 3.2 |
| Richardson Ranch 2/ | | 22 | 35S | 14E | 4800 | 2-28 | 16.0 | 4.7 | 4.0 |
| Rocky Point 2/ | | 26 | 35S | 6E | 4150 | 2-23 | 26.0 | 9.2 | 3.9 |
| Summer Rim | 841 | 15 | 33S | 16E | 7200 | 2-3 | 36.1 | 8.3 | N.R. |
| Taylor Butte | 842 | 16 | 33S | 11E | 5100 | 1-29 | 20.8 | 3.3 | N.R. |

GOOSE LAKE BASIN

| | | | | | | | | |
|--------------|----|-----|-----|------|------|------|-----|-----|
| Quartz Point | 33 | 37S | 16E | 5504 | 2-28 | 31.5 | 7.2 | 9.8 |
|--------------|----|-----|-----|------|------|------|-----|-----|

1/ The snow measurements are made principally by State watermasters, employees of irrigation and power companies and field personnel of the following Federal Government organizations: Forest Service, National Park Service, Geological Survey, Bureau of Reclamation, Biological Survey, Indian Service, and Bureau of Agricultural Engineering. This work is otherwise conducted cooperatively with the State Engineer of Oregon, Oregon Experiment Station, Oregon Cooperative Snow surveys, and with the U. S. Weather Bureau.

2/ Water content determined by melting a measured sample. (Calif. Ore. Power Co. Station)

N.R. - No report

